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EXAMINER

BASOM, BLAINE T

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 07/21/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/703,748

Applicant(s)

AAMODT ET AL.

Examiner

Blaine Basom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

The Examiner acknowledges the Applicants' amendments to claims 1, 6-9, 11, and 14. Regarding claims 1 and 11, the Applicants argue that the combination of Schanel et al. (U.S. Patent No. 5,704,028) and Selfridge et al. (U.S. Patent No. 5,680,530), as described in the previous Office Action, fails to teach a graphical preview of a node within a network diagram, whereas added to each of these claims, the graphical preview illustrates the physical characteristics and the data formatting characteristics of the node. In response, the Examiner presents the U.S. Patent of Unbedacht et al. (U.S. Patent No. 6,731,309), which as shown below, teaches presenting a graphical preview illustrating both physical and data formatting characteristics. The Applicants' arguments have thus been considered, but are moot in view of the following new grounds of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,704,028, which is attributed to Schanel et al. (and hereafter referred to as "Schanel"), over U.S. Patent No. 5,680,530, which is attributed to Selfridge et al. (and hereafter referred to as

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“Selfridge”), and also over U.S. Patent No. 6,731,309, which is attributed to Unbedacht et al. (and hereafter referred to as “Unbedacht”). In general, Schanel presents a computer application for creating and displaying a flow chart. Figure 2 illustrates the graphical user interface of this application, wherein particularly, reference number 28 designates an exemplary flow chart created using the application. As shown in figure 2, this flow chart consists of a plurality of nodes and links. Each node is displayed as one of a plurality of different shapes, and each link is displayed as a line connecting two such shapes. Since this flow chart consists of a plurality of nodes, which are connected via links, the flow chart is considered a network diagram like that expressed in the present application. Further regarding the present application, the graphical user interface of Figure 2 also includes various buttons for modifying the physical attributes of the nodes, in addition to the data displayed by the nodes (see column 6, line 30 – column 7, line 59). Thus the nodes of the flowchart may be customized by the user. Consequently, the application of Schanel is considered to teach a method for customizing the nodes of a network diagram.

With respect to claim 1, the user interface of Schanel’s application displays a plurality of options for modifying one or more of the physical characteristics of the nodes within a network diagram, i.e. flowchart (see column 6, line 44 – column 7, line 6). For example, Schanel discloses that a “fill pattern button” is displayed in the user interface, wherein this button is used to specify the pattern or color with which to fill in selected nodes (see column 6, lines 57-61). Similarly, the user interface includes a “border style button,” which is used to specify the border style of selected nodes (see column 6, lines 45-50). Schanel also discloses that these nodes in the network diagram may include one or more data fields (see column 13, lines 16-51). These data fields may be added to the nodes in the chart by using a “setup fields dialog box,” which also

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contains various options for modifying the characteristics of these data fields (see figure 9, and column 13, line 63 – column 14, line 56). For example, Schanel discloses that the setup fields dialog box includes a field format option, which allows the user to specify the specific data format for a particular data field (see column 14, lines 20-31). Moreover, Schanel discloses that a “field preferences dialog box” may be used to specify the appearance of the data fields on the chart (see figure 10, and column 14, line 57 – column 15, line 39). For instance, the field preferences dialog box includes options to specify the font and size of the data in a particular data field (see column 15, lines 13-16). Schanel thus teaches displaying, via this setup fields dialog box and field preferences dialog box, one or more options for modifying one or more formatting characteristics of the data contained within the respective nodes of a network diagram. It is understood that a user may select one or more of these options in order to modify the appearance of the data presented in the flow chart. Similarly, it is understood that the user may select one or more of the options presented in the user interface of figure 2, which as described above, result in the modification of the physical characteristics of the nodes within the network diagram. Schanel discloses that these selected options are applied to one or more of the nodes and data fields within the network diagram (for example, see column 6, line 62 – column 7, line 6 and column 14, lines 49-52). Thus to summarize, Schanel teaches: displaying one or more options for modifying one or more physical characteristics of nodes within a network diagram; displaying one or more options for modifying one or more formatting characteristics of data that is contained with respective nodes within the network diagram; receiving a selection of one or more of the options; and applying the selected options to one or more nodes in the network diagram. However, and in regard to the claimed invention, these options for modifying

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the physical characteristics of the nodes and the options for modifying the characteristics of the data contained within each node of the network diagram are not displayed within the same window, and whereas expressed in claim 1, this window is separate from the window used to display the network diagram. Moreover, Schanel does not explicitly teach displaying a graphical preview of a node in this window which indicates the currently selected options for the physical characteristics and the data characteristics of a group of nodes in the network diagram, and whereby as expressed in claim 1, this node is updated in response to the selection of these options.

Like Schanel, Selfridge presents an application for creating a flowchart, i.e. network diagram, which contains a plurality of nodes and links that cumulatively denote the tasks or features required in implementing a work product (see the abstract). Further like Schanel, Selfridge discloses that the visual aspects of these nodes, and that data contained within each node, may be modified by the user (see column 3, lines 32-38). Figure 9 of Selfridge presents the interface which allows the user to make such modifications (see figure 9, in addition to column 16, line 33 – column 18, line 29). For example, Selfridge discloses that this window presents an option to modify the font of the data displayed within each node, and presents options for modifying the shape and colors of each node (see column 16, lines 33-45). It is also noted that this window is separate from the window that displays the network diagram; the window of figure 3 displays the network diagram (see column 8, lines 32-47), whereas the window of figure 9 displays the options for modifying the characteristics of the nodes or data of the network diagram. Additionally, the window of figure 9 comprise a section, designated by reference number 911, which permits the user to preview the results of his or her modifications

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to the nodes and data (see column 18, lines 5-15). Selfridge specifically states that, “[s]ection 911 permits a user to see what a node or link made using a particular set of mappings looks like” (see column 17, lines 38-40). Consequently, it is understood that section 911 of figure 9 displays a preview, which indicates the currently selected options, and which is updated in response to selecting the options.

It would therefore have been obvious to one of ordinary skill in the art, having the teachings of Schanel and Selfridge before him at the time the invention was made, to modify the method taught by Schanel to include the teachings of Selfridge, such that the options for modifying the physical characteristics of the nodes and the options for modifying the data contained within each node are displayed within the same window, which as done by Selfridge, is different from the window used to display the network diagram. It would have been advantageous to one of ordinary skill to utilize such a combination because displaying such options in a single window, separate from that used to display the network diagram, presents a more organized presentation of the options, as is demonstrated by Selfridge. A user may find it easier to locate, and select multiple options if they are all displayed in a single window, as is done with Selfridge. Additionally, it would have been obvious to one of ordinary skill in the art, having the teachings of Schanel and Selfridge before him at the time the invention was made, to further modify the method taught by Schanel with the node preview capabilities of Selfridge, such that this window which displays the options for modifying the characteristics of the nodes and data also displays a preview, which is updated in response to selecting the options to modify the physical characteristics and data characteristics of the nodes, as is taught by Selfridge. It would have been advantageous to one of ordinary skill to utilize such a combination because

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displaying a preview allows the user to quickly view and ascertain if his or her modifications are sufficient, as is demonstrated by Selfridge. A preview thus allows a user to more efficiently modify the characteristics of a node to a user's taste than that of applying the modification, re-displaying the network diagram to see if the modifications are suitable, and then applying more modifications if the original modifications were not suitable. Consequently, Schanel and Selfridge teach a method for customizing nodes of a network diagram, comprising the steps of: displaying a plurality of options in a first window for modifying one or more physical characteristics of nodes within a network diagram in a second window; displaying a plurality of options in the first window for modifying one or more formatting characteristics of data that is contained within respective nodes within the network diagram; displaying a preview in the first window that indicates current selected options for physical and data formatting characteristics of a group of nodes; receiving a selection of one or more of the options; displaying an updated preview in the first window in response to receiving the selection of one or more options; and applying the selected options to one or more nodes in the network diagram which is contained within the second window. Schanel and Selfridge, however, don't explicitly teach that the preview comprises a node containing data with selected formatting characteristics, as is expressed in claim 1.

Like Schanel and Selfridge, Unbedacht discusses techniques for presenting previews which illustrate selected options (see column 1, lines 1-63). Unbedacht particularly teaches that for text editors, such a preview may be in a "What-you-see-is-what-you-get" format, meaning that it comprises a portion of a document and visually depicts the selected options affecting this portion (see column 1, lines 9-63). Unbedacht discloses that such a preview may also be

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implemented in graphical editing programs, which may be used to create flow charts, like that of Schanel and Selfridge discussed above (see column 2, lines 15-25).

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Schanel, Selfridge, and Unbedacht before him at the time the invention was made, to modify the preview taught by Schanel and Selfridge, such that it comprises a portion of a flow chart, specifically one or more nodes containing text data with formatting characteristics, as is taught by Unbedacht. It would have been advantageous to one of ordinary skill to utilize this combination, because such a “What-you-see-is-what-you-get” format allows a user to see how selected options affect the flow chart, thus better aiding the user in selecting options, as is demonstrated by Unbedacht.

Regarding claim 2, Schanel discloses that the user interface of figure 2 includes a “shape tool button,” which allows a user to select a shape from a “shape pallet” and place the selected shape into a network diagram (see column 7, lines 20-22). As expressed above, these shapes are understood to represent nodes within the network diagram. Reference number 60 in figure 2 indicates the shape pallet expressed by Schanel. As displayed by this shape pallet, the user may choose from a variety of different shapes to create a node. There is thus listed a plurality of categories of nodes for the network diagram, each category corresponding to a different shape. Further regarding claim 2, Schanel states that,

[s]electing shape tool button 64 also allows the user to choose shape attributes and properties. In the example of window 27 in FIG. 2, top tool bar 30 displays the shape tool buttons available when shape tool button 64 is selected. (See column 7, lines 22-25).

Therefore the buttons of the “top tool bar” are associated with each of the different shapes.

These buttons in the top tool bar designate those options described above, which are for

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modifying the physical characteristics of the nodes within a network diagram. Consequently, it is understood that Schanel further teaches associating these selected options with the corresponding categories, i.e. shapes, of nodes.

Concerning claim 11, Schanel teaches a method comprising: displaying options for modifying one or more physical characteristics of nodes within a network diagram; displaying one or more options for modifying one or more formatting characteristics of data that is contained within respective nodes within the network diagram; receiving a selection of one or more of the options; associating the selected options with nodes; and applying the selected options to one or more nodes in the network diagram, as is described above. Although Schanel may be interpreted to teach listing one or more categories of nodes, as is shown in the previous paragraph, Schanel does not explicitly teach displaying one or more options for modifying one or more physical characteristics of a category of nodes within the network diagram, *and* displaying one or more options for modifying one or more formatting characteristics of data that is contained within a category of nodes within the network diagram, such that as recited in claim 11, these options are associated with a corresponding category of nodes when selected. Schanel further does not teach displaying an indicator that shows that a highlight filter is activated, and displaying a highlight filter graphical preview comprising a node containing text data with formatting characteristics in response to selecting the options for modifying the physical characteristics of the nodes or the characteristics of data contained within the respective nodes of the network diagram, as is recited in claim 11.

As described above, Selfridge presents an application for creating a flowchart, i.e. network diagram, which contains a plurality of nodes and links that cumulatively denote the

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tasks or features required in implementing a work product. Moreover, Selfridge teaches that the visual appearance of these nodes may be based on the data, i.e. attributes, contained within and/or represented by the nodes, and that this mapping between the data and the visual appearance of the nodes may be set by the user (see column 16, lines 36-60). For example, the font or color of the data and nodes may be altered according to the data within the node (see column 17, lines 51-53). These mappings thus highlight particular nodes and are therefore considered a highlight filter like that expressed in the claimed invention. Further regarding the claimed invention, figure 9 shows the user interface which allows the user to create such mappings. The user interface of figure 9 lists various categories of nodes, categorized according to the data presented within and/or associated with each node (see column 17, line 33 – column 18, line 4). Moreover, the user interface of figure 9 displays options for modifying the physical characteristics (such as background color) of particular categories of nodes and displays options for modifying the characteristics of data (such as font color) of particular categories of nodes (see column 17, line 33 – column 18, line 4). When the user is done creating the mappings, the user selects a “write mappings” button, which applies the selected options to the nodes in the network diagram such that the nodes of each category designated with a particular mapping are displayed according to the mapping (see column 18, lines 16-18). It is understood that the completed interface of figure 9 and the write mappings button, which results in the altered network diagram, serves as an indicator that such a highlight filter is activated. Selfridge further discloses that a specific section of figure 9 permits a user to graphically preview the results of his or her mappings, or in other words, to preview current settings for nodes that illustrates the physical characteristics and the data characteristics of categories of nodes (see column 17, lines

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39-40, and column 18, lines 8-10). It is understood that as the options displayed by the interface of figure 9 are selected, this graphical preview is updated in order to show the current mappings.

It would therefore have been obvious to one of ordinary skill in the art, having the teachings of Schanel and Selfridge before him at the time the invention was made, to further modify the method taught by Schanel to include the mapping capabilities of Selfridge. It would have been advantageous to one of ordinary skill to utilize such a combination because creating mappings that associate the visual aspects of the nodes with the data contained within the nodes allows the user to more efficiently analyze the network diagram, as is demonstrated by Selfridge. Consequently, Schanel and Selfridge teach a method for highlighting categories of nodes within a network diagram, comprising the steps of: displaying an indicator that shows a highlight filter is activated; listing one or more categories of nodes for a network diagram; displaying a plurality of options for modifying one or more physical characteristics of nodes within a network diagram; displaying a plurality of options for modifying one or more formatting characteristics of data that is contained within respective nodes within the network diagram; displaying a preview that indicates current selected options for physical and data formatting characteristics of a group of nodes; receiving a selection of one or more of the options; displaying an updated preview in response to receiving the selection of one or more options; and applying the selected options to one or more nodes in the network diagram such that nodes of a category designated for highlighting relative to other nodes have the selected options of the highlight filter. Schanel and Selfridge, however, don't explicitly teach that the preview comprises a node containing data with selected formatting characteristics, as is expressed in claim 11.

As described above, Unbedacht teaches that a preview may be in a “What-you-see-is-what-you-get” format, meaning that it comprises a portion of a document and visually depicts the selected options affecting this portion.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Schanel, Selfridge, and Unbedacht before him at the time the invention was made, to modify the preview taught by Schanel and Selfridge, such that it comprises a portion of a flow chart, specifically one or more nodes containing text data with formatting characteristics, as is taught by Unbedacht. It would have been advantageous to one of ordinary skill to utilize this combination, because such a “What-you-see-is-what-you-get” format allows a user to see how selected options affect the flow chart, thus better aiding the user in selecting options, as is demonstrated by Unbedacht.

As per claim 3, it is understood that the options for modifying the physical characteristics of the nodes and the characteristics of the data displayed in the nodes, as are taught by Schanel, are applied to *selected* nodes. For example, Schanel states that the border style button, which is described above, may be used to “choose a border style for a **selected** shape” (see column 6, lines 45-50). The combination of Schanel, Selfridge, and Unbedacht described above thus teaches selecting one or more nodes within a network diagram, and applying selected options to only these selected nodes.

Concerning claims 4 and 12, Selfridge states that the section permits a user to preview the results of his or her modifications to the nodes, as is described above, more specifically “permits a user to see what a **node** or link made using a particular mapping looks like” (see column 17, lines 33-40; emphasis added). The “particular mapping” denotes the physical characteristics

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selected for the node, and their association with the data displayed in the node (see column 16, lines 36-60). Consequently, it is understood that the combination of Schanel, Selfridge, and Unbedacht described above thus teaches previewing the results of modifying the nodes by displaying data from a particular node.

In regard to claims 5 and 13, the options for modifying the physical characteristics of the nodes within a network diagram, as are taught by Schanel, include options for modifying the border shape (see column 7, lines 7-15), the border width (see column 6, lines 50-55), the border color (see column 6, lines 62-65), and the fill pattern (see column 6, lines 57-61) for the nodes.

In reference to claims 6, 7, and 14, the setup field dialog box disclosed by Schanel allows the user to create data fields to be placed within the nodes of a network diagram (see column 14, lines 42-49). Schanel further discloses that “[a] field can be stored as a template so that they can be used in other charts” (see column 13, lines 60-61). Here, “charts” is understood to refer to a network diagram. It is additionally understood that a user may save one or more fields templates for future network diagrams, or alternatively, may access previously saved templates from prior network diagrams. Consequently, it is understood that the combination of Schanel, Selfridge, and Unbedacht described above thus teaches the step of listing one or more predefined templates and the step of obtaining user defined data templates.

In regard to claim 8, the setup field dialog box disclosed by Schanel and described above includes a “field listings” pane, which lists the names of the data fields associated with the network diagram (see column 13, line 63 – column 14, line 2). For each of these data fields, a user may indicate if it is to be displayed within the nodes of the network diagram (see column 14, lines 7-9). Thus, since for each field name in the field listing pane the user is presented an

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option of display the field, the field listings pane is understood to list options for identifying names of data fields to be displayed within respective nodes.

As per claim 9, the field preference dialog box disclosed by Schanel and described above includes a "font size selector" that allows the user to specify the size of the font used in generating the data fields of the network diagram (see column 15, lines 13-16). It is understood that increasing the size of the font increases the size of the data fields and similarly, decreasing the size of the font decreases the size of the data fields. As shown in figure 2, these data fields are organized within the nodes in a grid-type layout, specifically a 3 X 1 grid. Thus adjusting the size of the font, adjusts the size of the data fields, which correspondingly adjusts the size of this grid. Consequently, it is understood that listing different font sizes, as the font size selector does, equivalently lists options for adjusting the size of a data grid for respective nodes within the network diagram.

Referring to claim 10, Schanel discloses that the above-described method is implemented as a software program stored on a computer-readable medium (see column 5, lines 49-55). It is thus understood that the above-described method of Schanel, Selfridge, and Unbedacht may be implemented on a computer readable medium having computer-executable instructions for performing the steps recited in claim 1.

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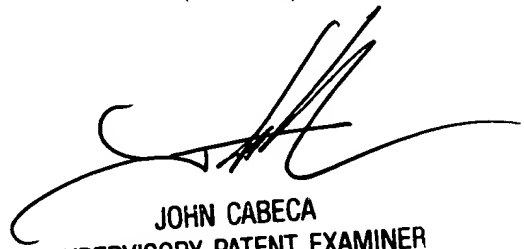
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (703) 305-7694. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

btb


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